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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,129

04/04/2005

Eric Verschueren

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02/11/2008

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EXAMINER

CHU, JOHN S Y

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

02/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,129	Applicant(s) VERSCHUEREN, ERIC	
	Examiner John S. Chu	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to the amendment filed May 8, 2007.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-40 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over KAMITANI et al (2002/0098288).

The claimed invention is drawn to the following:

1. (Currently Amended) A method of making a heat-sensitive lithographic printing plate precursor comprising the steps of
 - (i) providing a web of a lithographic support having a hydrophilic surface;
 - (ii) applying a coating comprising a phenolic resin on the hydrophilic surface of the web;
 - (iii) drying the coating;
 - (iv) a heating step wherein the web temperature is maintained above 150°C during a period of between 1 and 30 seconds ~~the glass transition temperature of the phenolic resin T_g during a period of between 0.1 and 60 seconds;~~
 - (v) an active cooling step wherein the web temperature is reduced at an average cooling rate which is higher than if the web would be kept under ambient conditions and which is between ~~0.5°C/s~~ 3°C/s and 30°C/s; and
 - (vi) winding the precursor on a core or cutting the precursor into sheets.

KAMITANI et al discloses a process of manufacturing a lithographic printing plate wherein a photosensitive layer is coated in a drying, heating step and a forced cooling step, see

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paragraphs [0067] – [0068] wherein a cooling device is disposed in a production line which cools the photosensitive coated layer from a heated temperature of 140° C to 40° C. Applicants are further directed to Tables 1 and 2 found on pages 10 and 12, respectively. In the examples Table 1 and 2 under the far infrared radiation heating device a 600° C and 700° C degree heat set is disclosed for 5 seconds wherein an exit temperature of the printing plate is 153° C and 152° C is disclosed. The examiner directs the skilled artisan to Fig. 1 wherein the disclosed infrared heating device is shown as item **50** with the temperature measurement taken at the thermometer at point **64** and the cooling device is seen to be defined as item **72**. The examiner argues that Figure 1 supports a temperature of above 150° C for more than 1 second for the fact that the temperature measurement is taken at point **62** which is a distance away from point **60**, the exit point from the heating device. Thus the temperature of the coated support would be higher than the disclosed temperature of 153° at point **62** according to Table 1 and 152° C according to Table 2. Using known heating times of 5 seconds as disclosed in Tables 1 and 2 and assuming constant conveyor speed, the length of the heating device is drawn to scale would be 25 mm, making 5 mm equal to one second. Thus the distance from the exit of heating device 50 and entrance to the cooling device 72 would be 10 mm making the time it takes a point in the support to travel from point 60 to point 76, 2 seconds. Clearly in the example the support would be above 150° C for more than 1 second thus anticipating the claimed step (iv).

With respect to the cooling device 72, assuming constant conveyor speed, the distance of device 72 is 33mm. Based on the length of device 60 being 5 seconds, this translates to the cooling duration to be about 6.6 seconds. To determine the rate of cooling the disclosed desire rate is stated to be from 140° C to less than 40° C, as state in paragraph [0068] on page 8. This

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discloses a difference of 100° C. Knowing the duration of the cooling step (6.6 seconds) the average rate of cooling can be calculated to be approximately 15.2° C/sec. As a result the cooling rate as claimed is anticipated by the KAMITANI et al assuming the drawing is to scale.

The rate of the cooling step is not explicitly disclosed, however the range of the temperature is known to be cooled from 140° C to 40° C, and the cooling device drawn to scale would imply a cooling time of 6.6 seconds, thus the cooling rate of 15.2° C/sec is calculated.

If the drawing is not to scale then the calculated cooling rate and duration time of the printing support above 150° C would be approximate figures that would not be far from the actual numbers if given the exact specifications of the conveyor process of Figure 1. Thus the examiner asserts by inherency that the claimed ranges for the web temperature and cooling step would meet the claimed ranges unless shown by applicant to be otherwise.

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. KAMITANI et al (6,933,017) is cited as the U.S. Patent to U.S. Publication 2002/0098288 and is cumulative.

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chu whose telephone number is (571) 272-1329. The examiner can normally be reached on Monday - Friday from 9:30 am to 6:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Cynthia Kelly, can be reached on (571) 272-1526

The fax phone number for the USPTO is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John S. Chu/
Primary Examiner, Art Unit 1795

J.Chu
February 3, 2008